

# Panasonic

## Operating Instructions

Colour Television

**TX-C84**

TQB8E0454

Welcome to the Panasonic family of customers.

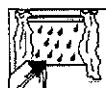
We hope that you will have many years of enjoyment from your new colour television set.



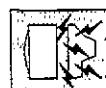
This TV set is designed to operate at 240v 50Hz A.C..



This TV set is designed to receive broadcast systems in the U.K. only, it will not receive broadcast systems in other countries.

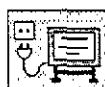


To prevent damage which might result in electric shock or fire, do not expose this TV set to rain or excessive moisture.



#### **WARNING: HIGH VOLTAGE !!!**

Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.



Remove the mains plug from the wall socket when the TV set is not used for a prolonged period of time. Especially when retiring at night.



#### **CABINET AND PICTURE TUBE CARE**

Remove the mains plug from the wall socket. The cabinet and picture tube can be kept in good condition by simply wiping with a clean, soft cloth moistened with mild detergent and water. Do not use solutions containing benzol or petroleum.



Adequate ventilation is essential to prevent failure of electrical components.



Avoid exposing the TV set to direct sunlight and other sources of heat.

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## **IMPORTANT**

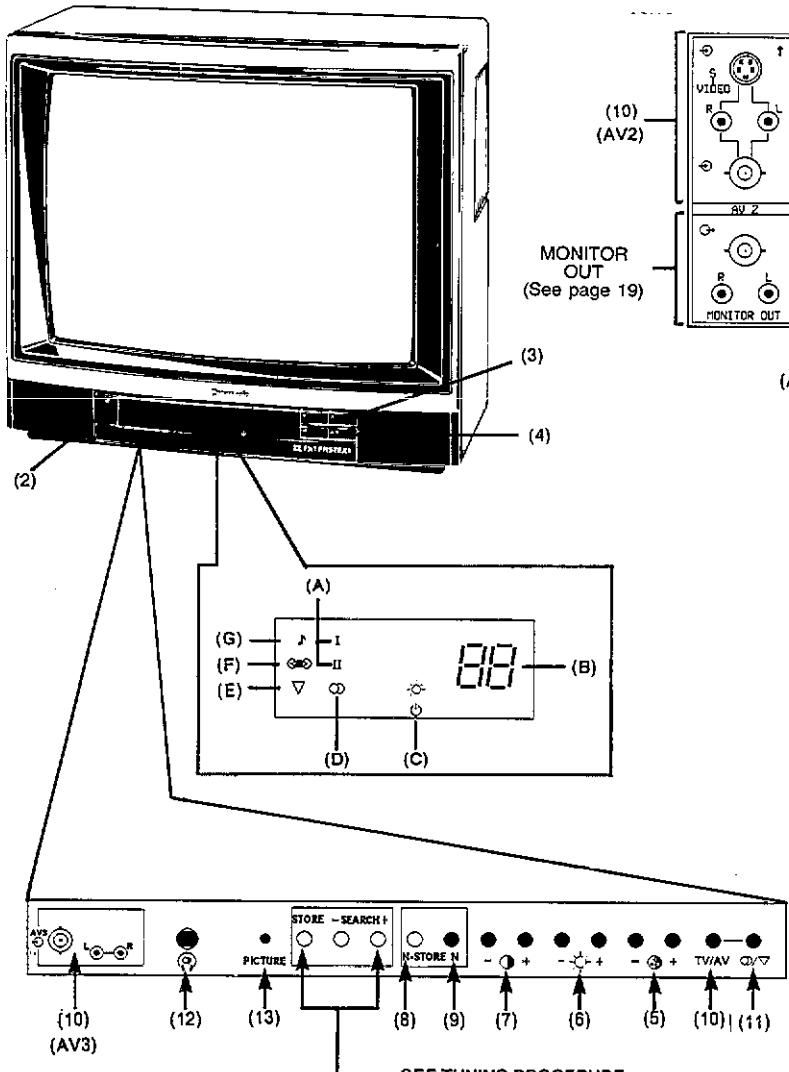
The wires in this mains lead are coloured in accordance with the following code:

**BLUE: NEUTRAL      BROWN: LIVE**

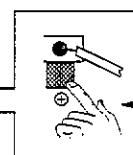
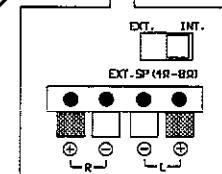
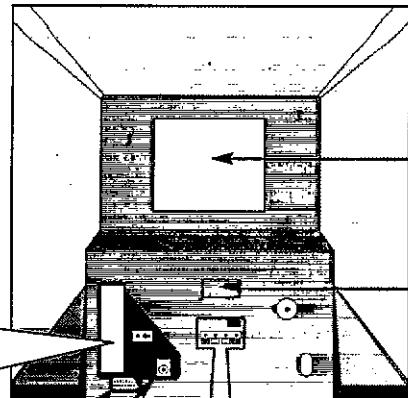
As the colours of the wires in this mains lead may not correspond to the markings identifying the terminals in your plug, proceed as follows:

1. The BLUE wire must be connected to the terminal marked 'N' or coloured black.
2. The BROWN wire must be connected to the terminal marked 'L' or coloured red.

# Location of Controls



(REAR COVER VIEW)

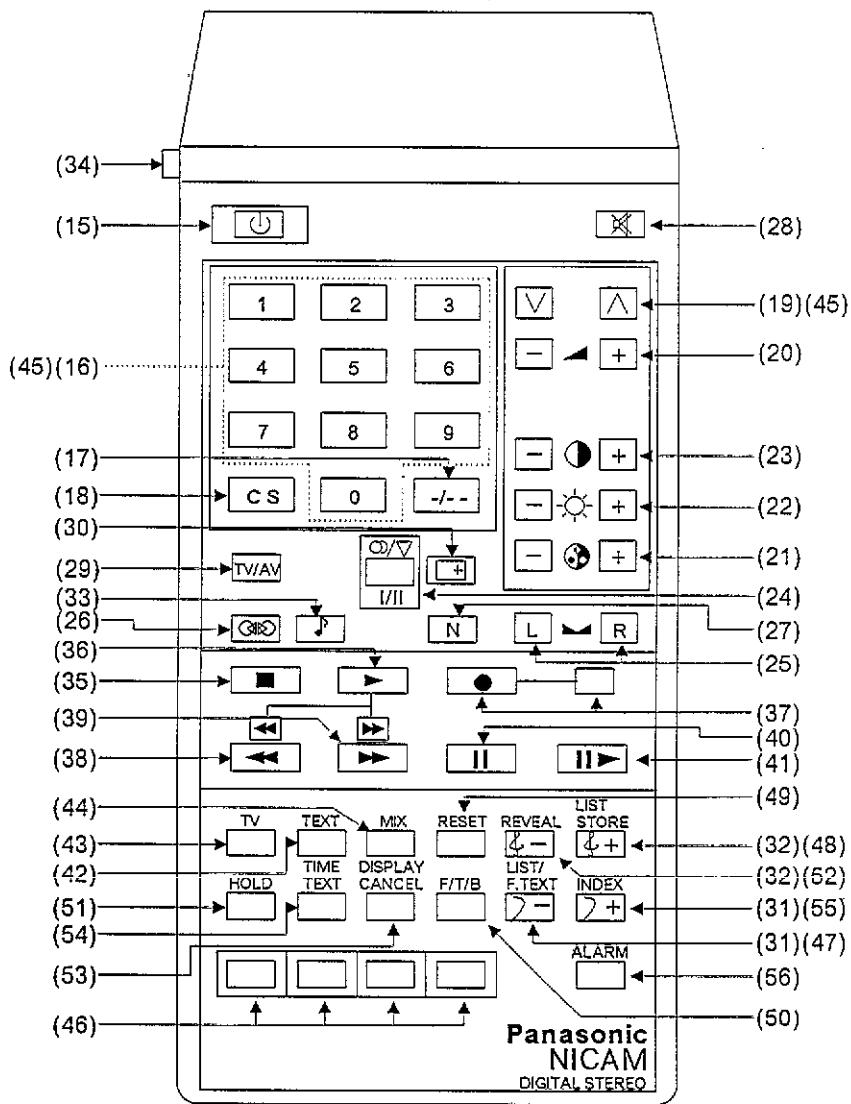


- (A) Mode indicators
- (B) Programme indicator
- (C) Standby indicator
- (D) Stereo indicator
- (E) Mono indicator
- (F) Ambience indicator
- (G) Music/Speech indicator

SEE TUNING PROCEDURE

# Remote Control Transmitter

Part No. TNQ8E0423

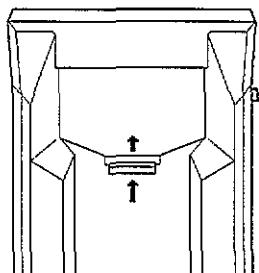


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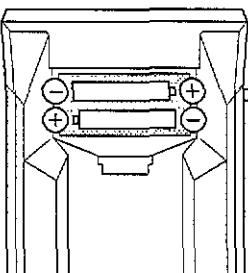
|                                  |    |                     |    |
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## BATTERY INSTALLATION & REPLACEMENT (Remote Control Transmitter)

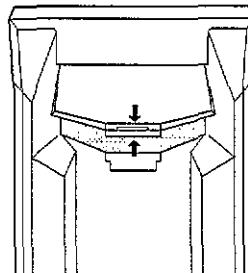
Batteries: Use two 'R03' (UM-4) dry cells (supplied).



1. Open the cover. Push the stopper and remove the cover.



2. Replace the batteries. Insert the batteries correctly as indicated by the (+) and (-) symbols.



3. Replace the cover.

### BATTERY PRECAUTIONS

The incorrect use of batteries can cause electrolyte leakage which will corrode the transmitter.

The following precautions must be observed carefully.

1. Do not use an old battery with a new one.
2. Do not use batteries other than the type supplied.
3. Ensure the batteries are inserted correctly.
4. Do not attempt to recharge the batteries.
5. Do not mix battery types (alkaline with carbon zinc etc.).
6. Do not use rechargeable (Ni-Cd) batteries. They are partially different in shape and performance and may not ensure the desired function.

## PROGRAMME POSITIONS

NOTE: There are 50 programme positions available i.e. 50 positions on which to store different channels.

Programme positions can be selected in a number of ways (see below).

1. Using the PROGRAMME UP/DOWN buttons on the TV or remote control.
2. Using buttons 0-9 on the remote control.
3. To select double figure programme positions, using the remote control, press the '-/-' button and then enter the programme number using buttons 0-9.

When using a VCR, ensure to use programme position '0' as this is specially adapted for VCR use.

## TUNING PROCEDURE

### METHOD 1.

Select a programme position (1-50), using the programme up/down buttons on the TV or remote control.



Press the **SEARCH** up or down buttons until the desired channel is received.



Press the **STORE** button to store this channel in the TV's memory.



Repeat this procedure, using different programme positions to store other channels.

### METHOD 2.

(if channel numbers are known)

Select a programme position (1-50). Press the button marked "CS" on the remote control. The display will now show "- -".

Enter the desired channel number, e.g. to receive channel 51, push buttons '5' and '1' consecutively.

Press the **STORE** button to store this channel in the TV's memory.

Repeat this procedure, using different programme positions to store other channels.

Consult your dealer about the channel numbers for your area.

## **OPERATION OF TV CONTROLS**

The numbers on these pages refer to the numbers on the LOCATION OF CONTROLS and REMOTE CONTROL TRANSMITTER pages.

**(1) AERIAL CONNECTION**

Connect the aerial lead to the socket marked 'A' at the rear of the TV.

**(2) POWER SWITCH**

Push to switch the TV on, push again to switch off.

**(3) PROGRAMME UP/DOWN**

Press once to increase or decrease the programme position by one.

**(4) VOLUME UP/DOWN**

Press the '+' button to increase the sound level. Press the '-' button to decrease the sound level.

**(5) COLOUR UP/DOWN**

Press the '+' button to increase the colour level. Press the '-' button to decrease the colour level.

**(6) BRIGHTNESS UP/DOWN**

Press the '+' button to increase the brightness level. Press the '-' button to decrease the brightness level.

**(7) CONTRAST UP/DOWN**

Press the '+' button to increase the contrast level. Press the '-' button to decrease the contrast level.

**(8) NORMALISATION STORE**

Adjust the volume, brightness, colour, and contrast to normal viewing levels. Press this button to store these levels in the TV memory.

**(9) NORMALISATION**

If levels of volume, brightness, colour and contrast have been altered, they can be set back to their stored levels, by pressing this button.

**(10) TV/AV SELECTION**

Terminals are available at the front and rear of the T.V. for direct audio/video inputs or outputs. To select these terminals, press the 'TV/AV' button, this selects AV1, press again to select AV2, press again to select AV3, press again to return to T.V. mode.

**NOTE:** AV2 has a connection for VCR's equipped with Super VHS. To use this facility; ensure that the S-VHS SELECT switch (on the VCR) is in the ON position (refer to VCR operating instructions for full details).

(11) **A.V. STEREO/MONO SELECTION**  
Press this button to select A.V. stereo or mono operation. The function indicator on the T.V. will light to show which mode is selected. This button operates in A.V. mode only.  
' $\infty$ ' = STEREO.      ' $\nabla$ ' = MONO.

(12) **HEADPHONE SOCKET**  
A standard 6mm stereo headphone socket is available for the connection of a pair of 8-300 Ohm impedance headphones. The TV speakers will be automatically disconnected while the headphones are connected.

(13) **PICTURE CONTROL**  
Turn left or right for a softer or sharper picture.

(14) **EXTERNAL LOUDSPEAKERS**  
External loudspeaker terminals are provided at the rear of the T.V. for the connection of a pair of Hi-Fi loudspeakers of 4-8 Ohm impedance. The speakers are switchable from internal to external by means of a slide switch situated above the terminals. To select external speakers, move the switch to the EXT. position. The internal speakers will be disconnected when external speakers are selected.

## REMOTE CONTROL OPERATION FOR TV

### (15) STANDBY

Press this button to switch the TV off for short periods. Press again to switch on, or select a programme position from 0-9.

### (16) PROG./CHANNEL/PAGE SELECTION

Press these buttons to select programme positions, channel numbers or teletext pages.

### (17) PROGRAMME POSITION 10 - 50

To select double figure programme positions (10-50) press this button and then enter the programme position number using buttons 0-9.

### (18) DIRECT CHANNEL SELECTION

Press this button, the display will now show '--'. Now enter the channel number, using buttons 0-9 on the keyboard. To select channel number 51, press buttons '5' and '1' consecutively.

**NOTE:** The channel number indication changes back to the previously selected programme position number.

### (19) PROGRAMME UP/DOWN

Press once to increase or decrease the programme position by one.

### (20) VOLUME UP/DOWN

Press the '+' button to increase the sound level. Press the '-' button to decrease the sound level.

### (21) COLOUR UP/DOWN

Press the '+' button to increase the colour level. Press the '-' button to decrease the colour level.

### (22) BRIGHTNESS UP/DOWN

Press the '+' button to increase the brightness level. Press the '-' button to decrease the brightness level.

### (23) CONTRAST UP/DOWN

Press the '+' button to increase the contrast level. Press the '-' button to decrease the contrast level.

## (24) STEREO/MONO SELECTION

The NICAM system is a ground-based TV service for digital stereo sound developed by the BBC.

To receive NICAM broadcasts, this TV set incorporates a NICAM decoder.

When a stereo, dual-soundtrack or monaural NICAM broadcast is received the mode indicators (see location of controls), will light to inform you of the type of broadcast received.

The NICAM programmes are always accompanied by standard broadcasts and you can select the desired soundtrack by pressing the '○/▽ I/II' button on the remote control.

Reference table for Received signal, Selection mode, Indication and Audio out.

| RECEIVING SIGNAL | SWITCHED MODE<br>TV<br>VHF<br>UHF | INDICATION    | SOUND OUT           |      |
|------------------|-----------------------------------|---------------|---------------------|------|
|                  |                                   |               | SPEAKER & HEADPHONE |      |
|                  |                                   |               | L-CH                | R-CH |
| FM SIGNAL        | PCM 1                             | NO INDICATION | FM                  | FM   |
|                  | FM                                | NO INDICATION | FM                  | FM   |
| PCM SIGNAL       | STEREO                            | ○○            | L                   | R    |
|                  | FM                                | ▽             | FM                  | FM   |
| PCM 1 MONO       | I                                 | I             | I                   | I    |
|                  | FM                                | ▽             | FM                  | FM   |
| PCM 2 MONO       | I                                 | I             | I                   | I    |
|                  | II                                | II            | II                  | II   |
|                  | I + II                            | I<br>II       | I                   | II   |
|                  | FM                                | ▽             | FM                  | FM   |

INDEPENDENT SWITCHING OPERATION OF RECEIVED SIGNAL.  
To carry out mode switching operation, use 'I/II' key of the remote control unit. The sound will change with each press of this button.

| RECEIVING SIGNAL | SWITCHING OPERATION        |
|------------------|----------------------------|
| FM ONLY          | FM—FM                      |
| PCM STEREO       | PCM STEREO—FM              |
| PCM 1 Mono       | PCM I—FM                   |
| PCM 2 Mono       | PCM I—PCM II—PCM I + II—FM |

### Note:

1. When the power is set ON, the mode is pre-set at 'PCM I /PCM STEREO'.
2. Even when the contents of the receiving signal undergo changes, selected mode is maintained.
3. When the receiving conditions deteriorate, listening will be easier if the FM mode is set at 'MONO' position.

(25) **BALANCE**

Press the 'R' button to bias the sound to the right. Press the 'L' button to bias the sound to the left.

(26) **AMBIENCE**

Ambience sound is a dynamic sound system that gives a feeling of greater acoustic presence. Press this button to obtain better acoustic sound from the speakers.

(27) **NORMALISATION**

If levels of volume, brightness, colour and contrast have been altered, they can be set back to their stored levels, by pressing this button.

(28) **SOUND MUTE**

Press this button to mute the sound. To restore the sound, perform any one of the following:

- (a) Press the sound mute button again.
- (b) Press the STANDBY button to set the TV in the standby condition, then press again.
- (c) Press the VOLUME up or down buttons.
- (d) Press the PROGRAMME up or down buttons.

(29) **TV/AV SELECTION**

Terminals are available at the front and rear of the T.V. for direct audio/video inputs or outputs. To select these terminals, press the 'TV/AV' button, this selects AV1, press again to select AV2, press again to select AV3, press again to return to T.V. mode.

**NOTE:** AV2 has a connection for VCR's equipped with SuperVHS. To use this facility; ensure that the S-VHS SELECT switch (on the VCR) is in the **ON** position (refer to VCR operating instructions for full details).

(30) **STATUS**

Press this button, the screen will now show the programme position at the top left, the time at the top right and the name of the teletext if transmitted. If the Panasonic alarm has been set, then the time remaining will be shown in place of the teletext name. The channel number will be displayed on the programme indicator.

**(31) BASS UP/DOWN**

Press the (+) button to increase the bass level. Press the (-) button to decrease the bass level.

**(32) TREBLE UP/DOWN**

Press the (+) button to increase the treble level. Press the (-) button to decrease the treble level.

**(33) MUSIC/SPEECH**

Press this button to select music or speech sound settings.

## **REMOTE CONTROL OPERATION FOR VCR**

This infra-red remote control is designed specifically to be used with selected Panasonic VCR's, consult your dealer for details.

Some VCR's have different functions, so to ensure compatibility, please refer to the VCR instruction book or consult your dealer.

**NOTE:** The VCR functions will not operate unless the VCR SELECT button is pressed in conjunction with the desired VCR function.

E.g. To select **STOP**, press the **VCR SELECT** button with the **STOP** button.

When using a VCR, ensure to use programme position '0' as this is specially adapted for VCR use.

**(34) VCR SELECT**

Press and hold this button while using the following functions.

**(35) STOP**

Press this button to stop the tape.

**(36) PLAY**

Press this button to playback the tape.

**(37) RECORD**

Press these buttons together to record.

**(38) REWIND/REVIEW**

Press this button to rewind the tape.  
In playback mode, press this button to view the picture in reverse rapidly.

**(39) FAST FORWARD/CUE**

Press this button to fast forward the tape. In playback mode, press this button to view the picture rapidly forward.

**(40) PAUSE/STILL**

Press this button in playback mode, the picture will stop.

**(41) STILL ADVANCE**

While in the PAUSE/STILL mode press this button to advance the picture one frame at a time.

## TELETEXT OPERATION

### (42) TEXT

Press this button to change from TV to TELETEXT mode.

**NOTE:** Teletext information is only available if the channel selected is transmitting teletext.

### (43) TV

Press this button to change back to TV mode.

**NOTE:** Pressing the 'N' button will also change back to TV mode.

### (44) MIX

Press this button to superimpose TELETEXT pictures onto the TV display.

**NOTE:** Unless the sound is muted, it will be present in TEXT, TV or MIX modes.

To exit this mode press TV, TEXT or 'N' buttons.

### (45) PAGE SELECTION

Pages can be selected in two ways:

- (a) By entering the page number directly, using buttons 0-9 on the remote control.
- (b) By using the 'VA' buttons on the remote control to increase or decrease the page number by one.

### (46) RED/GREEN/YELLOW/BLUE buttons

These four buttons are colour-coded to correspond to the differently coloured subjects in 'FASTEXT' mode. In 'LIST STORE' mode they correspond to the differently coloured page numbers.

### (47) LIST/F.TEXT

Press this button to change from FASTEXT mode to LIST STORE mode and vice versa. In FASTEXT mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, press the appropriately coloured button.

This facility enables fast access to information of the subjects shown.

**NOTE:** These subjects are determined by the broadcasting authorities and cannot be changed by the customer.

(48) **LIST STORE**

In this mode, four differently coloured page numbers are situated at the bottom of the screen, each of these numbers can be altered and stored in the TV memory. To do this, press any one of the coloured buttons on the remote control, this will select the number to be changed. Then enter the new page number to be stored, using buttons 0-9 on the remote control.

**NOTE:** When first switching to **LIST STORE** mode, the page number coloured **RED** will be automatically selected. Press and hold the **LIST STORE** button until the page numbers change to **WHITE** indicating that the number is now stored in the TV memory.

**NOTE:** All four page numbers will be stored at the same time. This facility enables the customer to store four different page numbers on 10 programme positions. This means that up to forty teletext page numbers can be stored in the TV memory. These pages will remain in the memory, even when switching off. If there is no page number matching the entered number then the number selected will keep flashing.

(49) **RESET**

Pressing this button in the **FASTEXT** mode will reset the present page, back to the index page. Pressing this button in the **LIST STORE** mode resets the present page to the **RED** coloured page number.

(50) **TOP/BOTTOM/FULL**

Press this button to expand the **TOP** half of the display. Press again to expand the **BOTTOM** half of the display. Press again to return the display to normal size.

(51) **HOLD**

When teletext information exceeds more than one page, the display changes automatically to the next page. To hold a particular page, press this button. The page number at the top left of the screen changes to '**HOLD**'. This display will remain until the **HOLD** button is pressed again and the page number is restored.

(52) **REVEAL**

Press this button to reveal hidden words e.g. quiz pages with hidden answers. Press again to hide the word.

**(53) DISPLAY CANCEL**

While searching for a teletext page, the TV display can be viewed by pressing this button. When the page has been found, the found symbol will be displayed.

**(54) TIME TEXT**

This function is used for selected pages only e.g. The teletext alarm page. Refer to the main teletext index. Select the teletext **ALARM PAGE**. Press the **TIME TEXT** button. Tx:xx will be displayed on the screen, now enter the time at which this alarm page should be displayed, using buttons 0-9 on the remote control. E.g. for 3.30pm, press buttons 1,5,3,0 consecutively (this feature uses a 24 hour clock) Press the **DISPLAY CANCEL** button to view TV. Then at 3.30pm the alarm page will be displayed. To cancel this feature, press the **RESET** button any time.

**(55) INDEX**

Press this button in **FASTEXT** mode to return to the index page. This button may need to be pressed more than once, due to the way information is transmitted.

**(56) PANASONIC ALARM**

This function can be used in **TV** or **TELETEXT** modes.

E.g. To set this alarm for two hours ahead.

(a) Press the **ALARM** button.

(b) Using buttons 0-9 on the remote control, press 0,2,0,0 consecutively.

The screen will show a normal TV display until after two hours when the **PANASONIC ALARM** page will be displayed.

**NOTE:** To check how much time is left until the alarm page is displayed, press the **STATUS** button. To cancel this feature press the **ALARM** button again and press the **RESET** button.

## **GENERAL INFORMATION**

### **SLEEP FEATURE**

If the set is not switched off when the TV station stops transmitting at the end of the evening, it will automatically go to standby mode after 30 minutes.

### **SERVICE**

To obtain service please contact your local Panasonic dealer, and quote the model number and serial number (both are located at the rear of the TV).

### **TV GAMES / HOME COMPUTERS**

Extended use of TV games or home computers with any television set can cause a permanent 'shadow' on the screen. This type of irreversible picture tube damage, can be limited by observing the following points:

- (a) Reduce the brightness and contrast levels to a minimum viewing level.
- (b) Do not operate the television set for a continuous period of time while using TV games or home computers.
- (c) Ensure the TV is off when not in actual use.

This type of picture tube damage, is not an operating defect, and as such is not covered by the Panasonic warranty.

## TROUBLE SHOOTING

Before calling for service, make a few simple checks as follows:

| SYMPTOMS   | CHECKS  |
|--|---|
| No picture<br>No sound   | Not plugged into A.C. supply.<br>Not switched on.<br>Check contrast, brightness<br>and volume settings. |
| Normal picture<br>No sound   | Check volume level.<br>Check sound mute button<br>on remote control.                                    |
| No colour<br>Normal sound  | Check colour level.   |
| Interference on screen<br>Distorted sound  | Electrical appliances,<br>cars, motorcycles,<br>fluorescent lights.                                     |
| Multiple image.<br>Snowy picture.<br>Distorted sound.<br>Characters missing<br>in teletext mode. | Direction, location and/or<br>aerial connection.  |
| Remote control mal-<br>functions or reduction<br>in operating distance.                          | Replace batteries.<br>Clean indicator window.<br>Check battery terminals.                               |

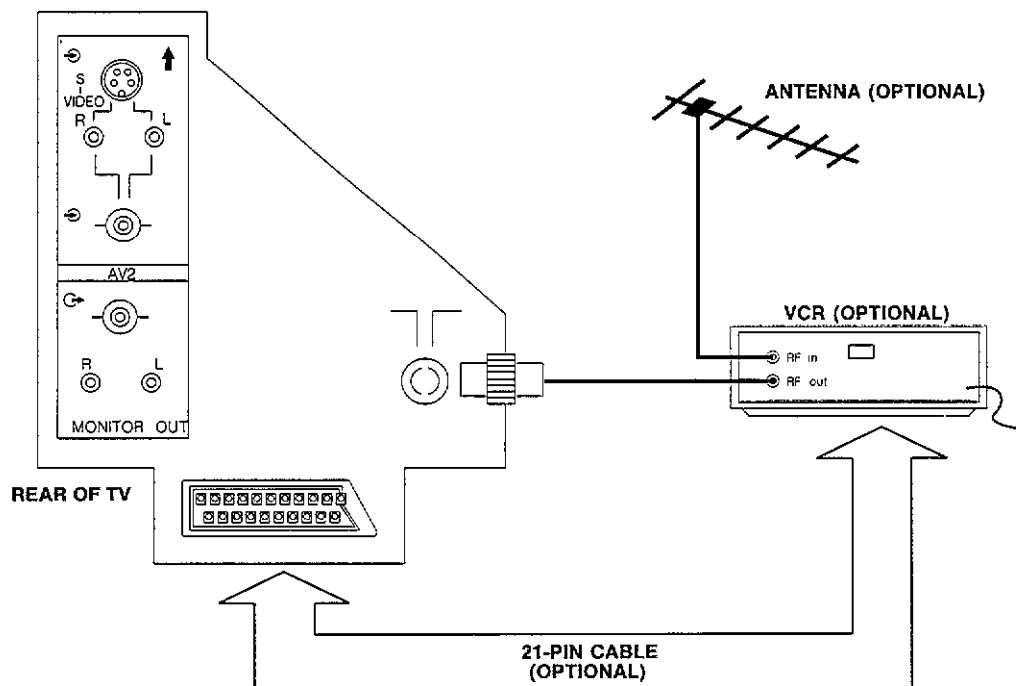
## SPECIFICATIONS

|                   |  |
|-------------------|--|
| Power source      | 240V 50Hz AC.  |
| Power consumption | 141 W.   |
| Receiving system  | CCIR: 625 lines PAL I.   |
| Tuning system     | Frequency synthesised.   |
| Picture tube      | 59cm V FST.  |
| Speakers          | 2 12cm round.<br>2 9cm x 5cm oval.   |
| Audio output      | 2 x 10W.   |
| Terminals         | Aerial.<br>External loudspeaker.<br>Headphone.<br>AV1 - 21 pin terminal video/audio in/out.<br>AV2 - BNC video in.<br>- RCA audio in.<br>- S-Video in.<br>AV3 - BNC video in.<br>RCA audio in.<br>Monitor Out - BNC video out.<br>RCA audio out. |
| Dimensions        | (H) 549mm.<br>(W) 594mm.<br>(D) 448.5mm.   |
| Weight            | 33kg.  |
| Accessories:      | 1 remote control (TNQ8E0423)<br>2 R03 size batteries.<br>1 Set stand (TS2422)  |

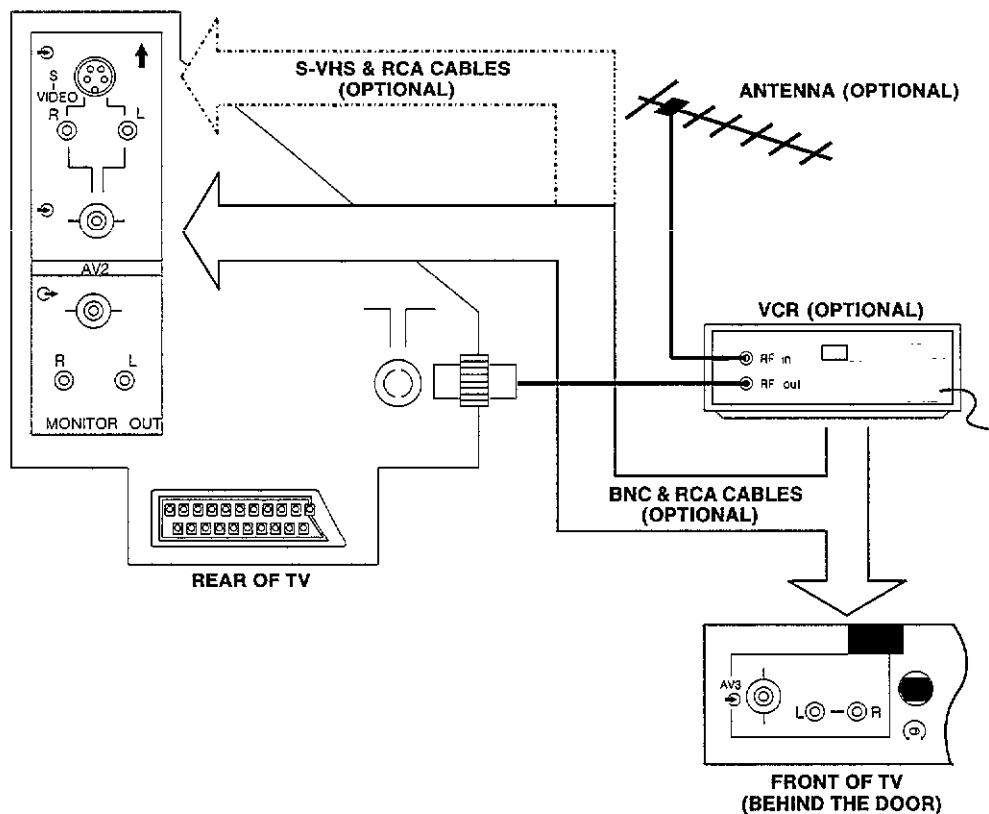
### NOTE:

Specifications are subject to change without notice. Weight and dimensions shown are approximate.

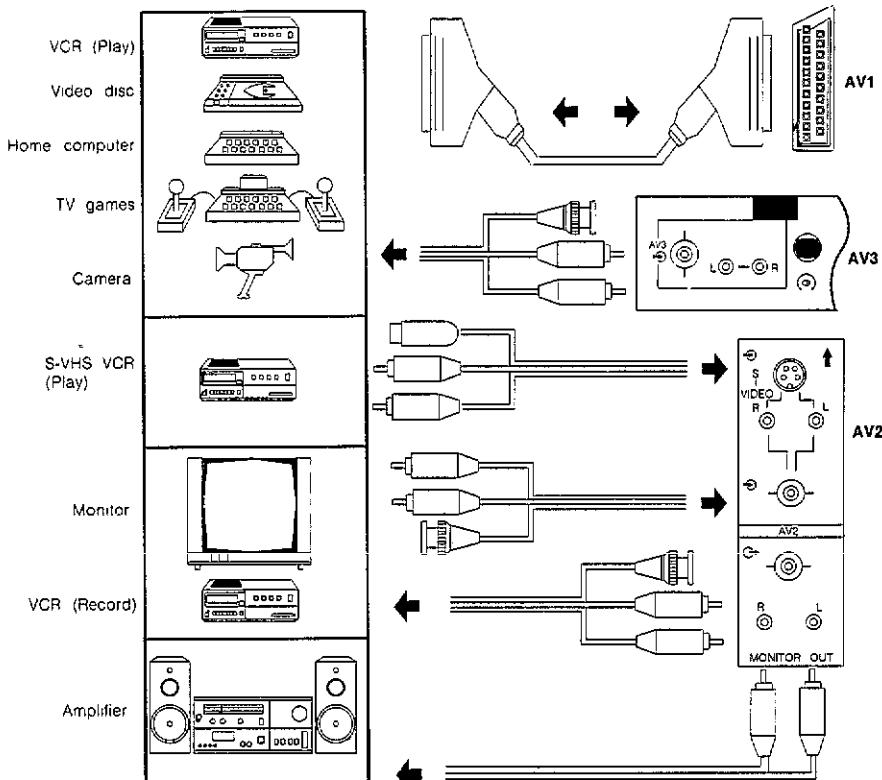
## CONNECTION OF VCR WITH THE 21-PIN TERMINAL



## CONNECTION OF VCR WITHOUT THE 21-PIN TERMINAL



# AUDIO VIDEO CONNECTIONS



Consult your dealer for suitable cables.

When using AV terminals, follow these precautions:

1. Do not connect a computer with a TTL output (5V) to any terminal on this set.
2. Never connect the same VCR to an input ( $\ominus$ ) and an output ( $\oplus$ ) on this TV set with the aerial connected, this may cause malfunction and will damage the VCR and the TV.

NOTE: The MONITOR OUT terminals contain signals which are shown on the TV screen at that time, i.e. TV programmes or signals from AV1, AV2 or AV3 inputs.

$\ominus$  This symbol indicates INPUT only.  $\oplus$  This symbol indicates OUTPUT only.

$\leftrightarrow$  This symbol indicates INPUT and OUTPUT.